

In re: Joo et al.  
Serial No.: 10/715,273  
Filed: November 17, 2003  
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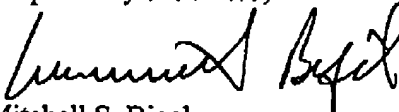
### REMARKS

Applicants appreciate the thorough examination of the present application that is reflected in the Official Action of March 7, 2005, and the citation of U.S. Patent 6,372,598 to Kang et al. In response, Claim 7 has been rewritten in independent form by incorporating the recitations of Claim 7 and Claim 3 into Claim 1. Applicants respectfully submit that Kang et al. does not describe or suggest that the first portion of the metal layer comprises Pt, and the second portion comprises at least one of Ru, Rh, Os and Pd; that is, comprises Ru, Rh, Os and/or Pd. Moreover, Claim 13 also has been rewritten in independent form. Applicants respectfully submit that Kang et al. does not appear to describe or suggest that the lower electrode comprises a metal layer on the substrate and a metal oxide layer on a metal layer, wherein the hemispherical grain lumps protrude from the metal oxide layer opposite the metal layer. In this regard, Applicants note that Column 5, lines 1-6 of Kang et al. simply lists materials that can be used to form the conductive layer, but does not describe or suggest the combination recited in Claim 13.

The dependent claims are patentable at least per the patentability of the independent claims from which they depend.

In view of the above, Applicants respectfully request allowance of the present application and passing the application to issue.

Respectfully submitted,

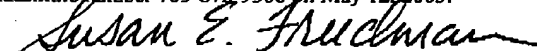


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I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office via facsimile number 703-872-9306 on May 12, 2005.



Susan E. Freedman  
Date of Signature: May 12, 2005